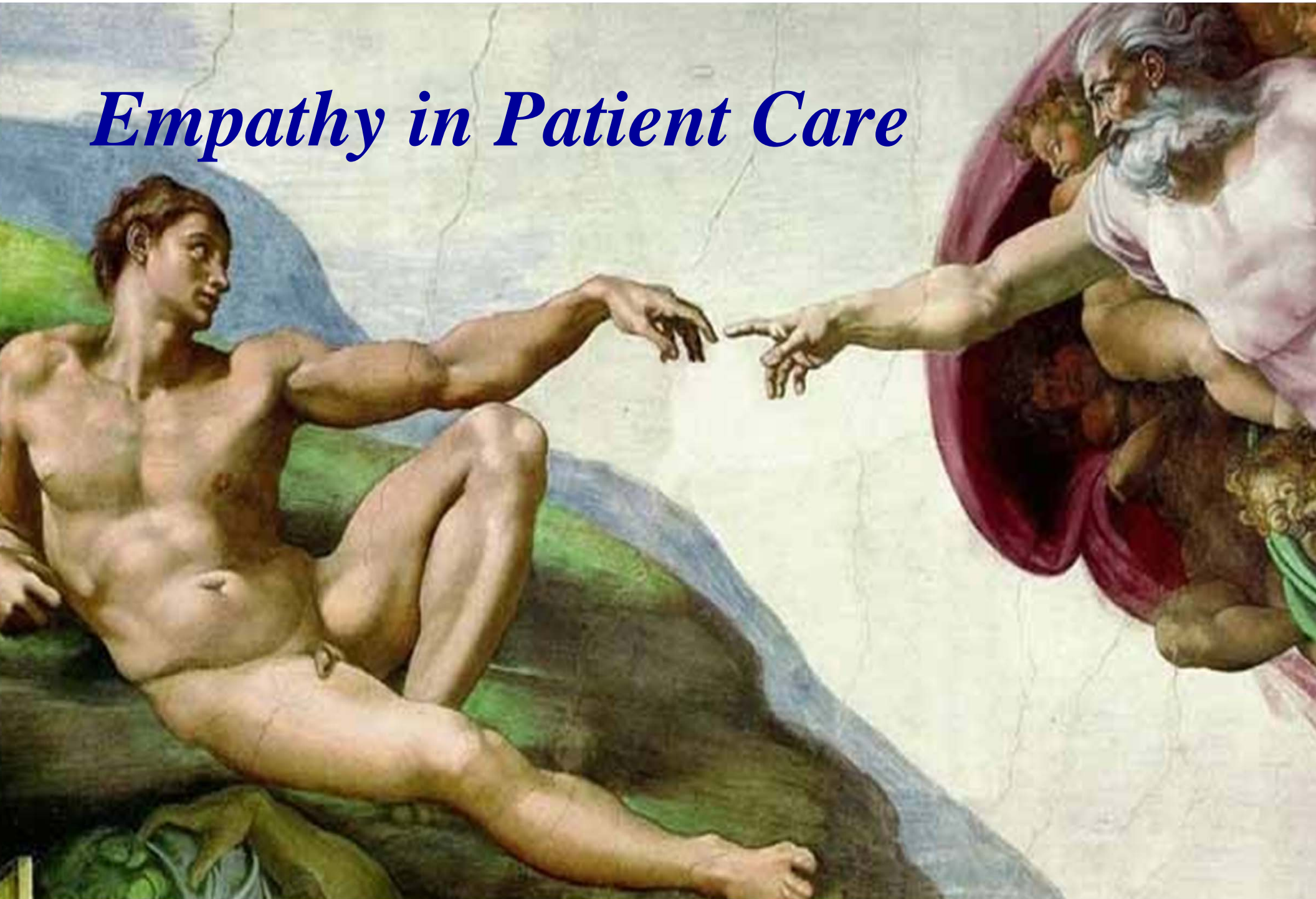


Empathy in Patient Care



Empathy in Patient Care: Myth or Reality?

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Learning Objectives

1. Identify the differences between empathy and sympathy and their outcomes in patient care
2. Define the key ingredients in the context of patient care
3. Describe the measurement of empathy in health professions students and practitioners

Empathy as a Myth

Empathy may not even exist in reality after all (Lane, 1986).

Empathy should be eliminated and replaced by a less ambiguous term (Levy, 1997).

Empathy is difficult to define and hard to measure (Kestenbaum et al., 1989).

An Often-Cited Description of Empathy

“Empathy is the ability to perceive the internal frame of reference of another with accuracy, as if one were the other person without ever losing the ‘as if’ condition.”

Carl Rogers, 1959, *Psychology: A study of science*, New York: McGraw-Hill.

Empathy versus Sympathy

Empathy is entering into sufferer's mind and understanding his pain from within as if the pain were ours, but remain his own.

Sympathy is sharing feelings together with the patient as if the pain is ours and remains so.

Wilmer, 1968, *British Journal of Medical Psychology*, 41, 243-248.

Overabundance of sympathy can be overwhelming in patient care, thus impedes the clinician's performance (inverted U function), whereas empathy needs no restraining boundaries.

Issues such as “**compassion fatigue,**” “**secondary traumatic stress,**” “**detached concern,**” “**affective distance,**” and “**clinical neutrality**” are applicable to sympathetic involvement, not empathic engagement in patient care.

Definition of Empathy in the Context of Patient Care

Empathy is a predominantly cognitive (rather than emotional) attribute which involves an understanding (rather than feeling) of experiences, concerns, and perspective of the patient, combined with a capacity to communicate this understanding, and an intention to help.”

Hojat, et al., 2002, *Am J Psychiatry*, 159, 1563-1569.

Hojat, 2007, *Empathy in Patient Care*, p. 80.

Hojat, et al., 2009, *Academic Medicine*, 84, 1182-1191.

Measurement of Empathy in Medical Education and Patient Care

The Jefferson Scale of Empathy

(S-Version, HP-Version, and HPS-Version)

- Contains 20 Likert-type items (7-point scale).
- Data support its *validity* (construct, criterion-related, convergent, and discriminant), and *reliability* (internal consistency: coefficient alpha; and score stability: test-retest).

Hojat, et al., 2001, *Educ & Psych Measurement*, 61, 349-365.

Hojat, et al., 2002, *Am J Psychiatry*, 159, 1563-1569.

SAMPLE ITEMS

From the S-Version:

“Because people are different, it is difficult to see things from patients’ perspectives.”

From the HP-Version:

“Because people are different, it is difficult to see things from my patients’ perspectives.”

From the HPS-Version:

“Because people are different, it is difficult to see things from patients’ perspectives.”

What have we learned so far?

Conceptualization and measurement:

- Physician empathy is a multidimensional concept.
- Physician empathy can be operationally defined and measured.

Hojat, et al., 2001, *Educ & Psych Measurement*, 61, 349-365.

Hojat, et al., 2002, *Am J Psychiatry*, 159, 1563-1569.

Hojat, *Empathy in Patient Care*, 2007.

Empathy and Academic Performance in Undergraduate Medical Education:

- Empathy scores are significantly correlated with global ratings of clinical competence in medical school.
- Empathy scores are not correlated with performance on objective examination of knowledge in both basic and clinical sciences.

Hojat, et al., 2002, *Med Educ*, 36, 522-527.

Physician empathy and gender:

Women in medical school, nursing school, and in medical practice tend to obtain higher empathy scores than men.

Hojat, et al., 2001, *Educ & Psych Measurement*, 61, 349-365.

Hojat, et al., 2002, *Med Educ*, 36, 522-527.

Hojat, et al., 2002, *Am J Psychiatry*, 159, 1563-1569.

Hojat, et al., 2002, *Acad Med.*, 77, s58-s60.

Ward, et al, 2009, *J Nursing Measurement*, 17, 73-88.

Physician empathy and specialty:

Physicians in “patient-oriented” specialties (e.g., psychiatry, family medicine, internal medicine, pediatrics, obstetrics and gynecology, emergency medicine, and medical subspecialties) obtained higher empathy scores than their counterparts in “technology-procedure-oriented” specialties (e.g., anesthesiology, pathology, radiology, surgery and surgical subspecialties).

Hojat, et al., 2001, *Acad Med*, 76, 669.

Hojat, et al., 2002, *Acad Med*, 77, s58-s60.

Hojat, et al., 2002, *Am J Psychiatry*, 159, 1563-1569.

Long-term predictive validity of the JSE scores

A significant relationship was observed between scores of the JSE administered at the beginning of the third-year of medical school, and ratings of empathic behavior made three years later by directors of residency training programs (at the end of the first residency year).

Hojat et al., 2005, *Journal of Social Psychology*, 145, 663-672.

JSE scores and personality measures

The JSE scores were associated with **higher sociability** and **lower aggressive-hostility** scores (measured by the Zuckerman-Kuhlman Personality Questionnaire).

Hojat et al., 2005, *Personality and Individual Differences*, 39, 1205-1215.

Empathy scores and peer nomination

Third-year medical students who scored high on the JSE were more likely than low scorers to be nominated by their classmates on professionalism attributes.

Pohl et al., 2011, *Academic Medicine*, 86, 747-751.

Empathy and OSCE

Scores of the JSE were significantly associated with simulated patients' ratings of students' empathy in Objective Structured Clinical Examination (OSCE).

Berg, et al., 2011, *Medical Teacher*, 33, 388-391.

Evaluation of empathic and sympathetic orientations

Empathic and sympathetic orientations toward patient care are two different entities that can be measured by responses to clinical vignettes.

Hojat, et al, 2011, *Academic Medicine*, 86, 989-995.

JSE scores and perceptions of parents

Higher levels of **satisfaction with early relationships with the mother** (retrospective reports) were significantly associated with higher scores on the JSE. Such significant association was not observed for reported satisfaction with early relationships with the father.

Hojat et al., 2005, *Personality and Individual Differences*, 39, 1205-1215.

Physician's Empathy and Patient's Perceptions

Physicians' self-report empathy (measured by the JSE) is associated with patients' perceptions of their physician empathy.

Glaser, et al., 2007, *Medical Science Monitor*, 13, pp.291-294.

Patient's perception of physician empathy is associated with patient's assessment of physicians humanistic behavior.

Kane, et al., 2007, *Croatian Journal of Medicine*, 48, 81-86.

Patient perceptions of Physician Empathy, Patient Satisfaction & Compliance

- Patient perceptions of physician empathy is highly correlated with **patient satisfaction** with physicians.
- Patient perceptions of physician empathy is significantly associated with **patient compliance**.

Hojat et al, *Int J Med Educ*. 2009, 1, 83-87.

Change of Empathy in Undergraduate Medical Education:

Empathy scores of medical students declined significantly during clinical education (third year) in medical school.

Hojat, et al, *Medical Education*, 2004, 38, 934-941.

Hojat, et al, *Acad Med*. 2009, 84, 1182-1191.

Change of Empathy in Graduate Medical Education:

- We observed a decline in empathy scores among physicians at different levels of postgraduate medical education, but the decline did not reach the conventional level of statistical significance.

Mangione, et al., 2002, *Med Teacher*, 24, 371-374.

- Another study on medical residents reported a significant decline in physicians' empathic concern, and perspective taking during postgraduate training.

Bellini, et al., 2002, *JAMA*, 287, 3143-3146.

Physician Empathy and Patient Outcomes

Two key studies In the U.S. and Italy

Physicians' Empathy and Clinical Outcomes for Diabetic Patients

Mohammadreza Hojat, PhD; Daniel Z. Louis, MS;
Fred W. Markham, MD; Richard Wender, MD;
Carol Rabinowitz; Joseph S. Gonnella, MD

(March 2011)

Purpose of the study:

To test the hypothesis that physicians' empathy is associated with positive clinical outcomes for diabetic patients.

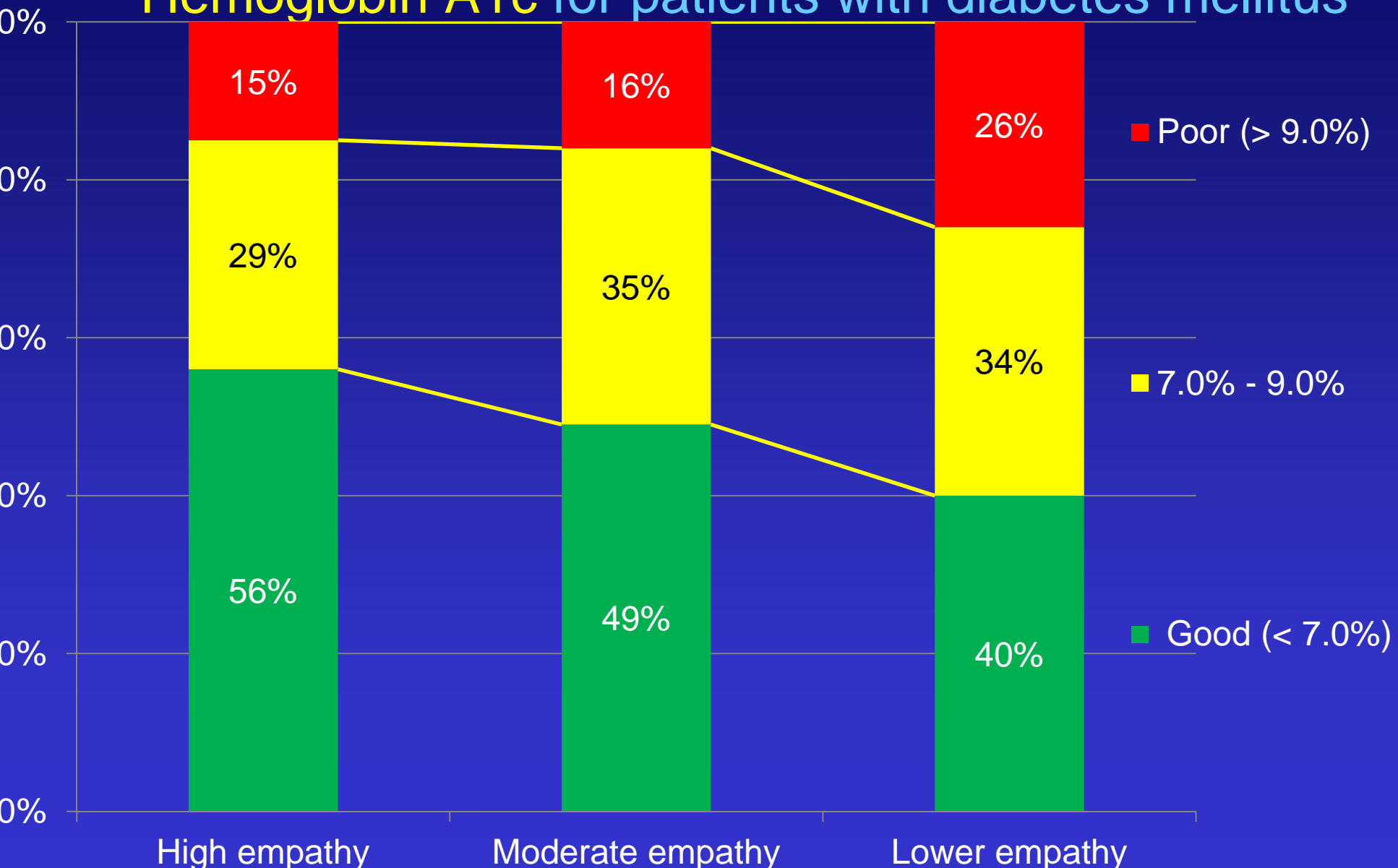
Data and methods:

- 891 patients with diabetes mellitus treated by 29 physicians from Jefferson Department of Family and Community Medicine
- 100% response rate among the physicians in completing the Jefferson Scale of Empathy
- Physicians were categorized into 3 groups: high, moderate, and low empathy scorers

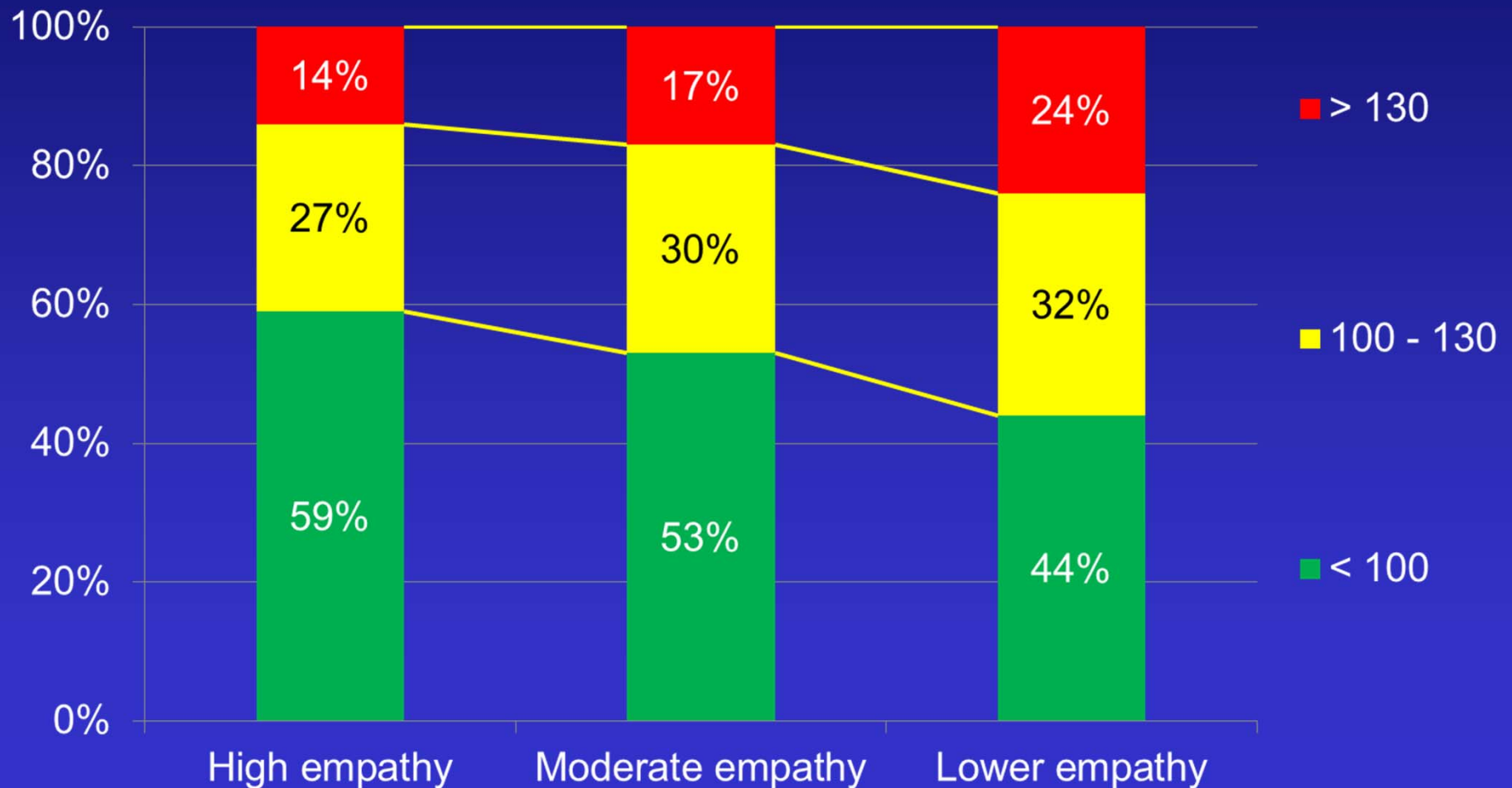
Patient outcomes:

- Hemoglobin A1c categorized as good control (<7.0%); poor control (>9.0%)
- LDL-C categorized as good control (<100); poor control (>130)

Primary care physician empathy scores and Hemoglobin A1c for patients with diabetes mellitus



Primary care physician empathy scores and low-density-lipoprotein cholesterol (LDL-C) for patients with diabetes mellitus



Results:

- Logistic regression analysis to control for impact of:
 - Physician gender and age
 - Patient gender and age
 - Type of health insurance
- Patients of physicians with **high empathy scores** were significantly more likely to have **good control of hemoglobin A1c** than were patients of physicians with low empathy scores
(odds ratio = 1.8; 95% CI, 1.3 – 2.7)
- Patients of physicians with **high empathy scores** were significantly more likely to have **good LDL-C control** than were patients of physicians with low empathy scores
(odds ratio = 1.8; 95% CI, 1.2 – 2.6)

The Relationship Between Physician Empathy and Disease Complications: An Empirical Study of Primary Care Physicians and Their Diabetic Patients in Parma, Italy

Stefano Del Canale, MD, PhD; Daniel Z. Louis, MS; Vittorio Maio, PharmD, MS, MSPH; Xiaohong Wang, MS; Giuseppina Rossi, MD; Mohammadreza Hojat, PhD; Joseph S. Gonnella, MD

(September 2012)



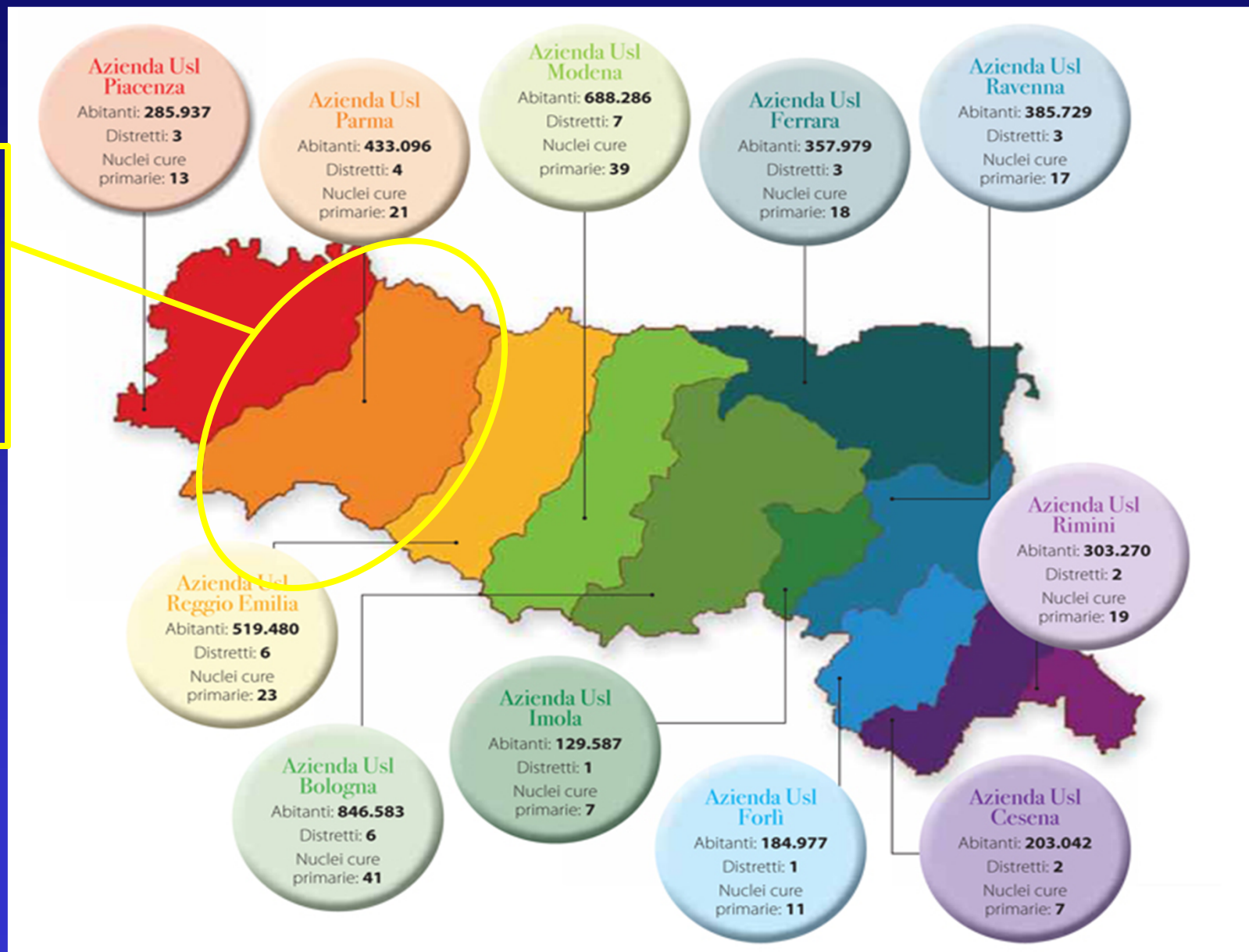
Italian Health Care System

- Italian National Health Service
 - Similar to the UK system
- Coverage is universal
 - Italian constitution guarantees right to health care
- Financing
 - Specialty physicians – salaried employees of the National Health Service
 - Primary care physicians - capitated
 - Hospitals – DRG type financing system
- Regions (20)
 - responsible for providing health care for residents

Population ~4.4 million; 11 Local Health Authorities

Parma Health
Authority
Population: 433,000

21 primary care
teams/medical
homes

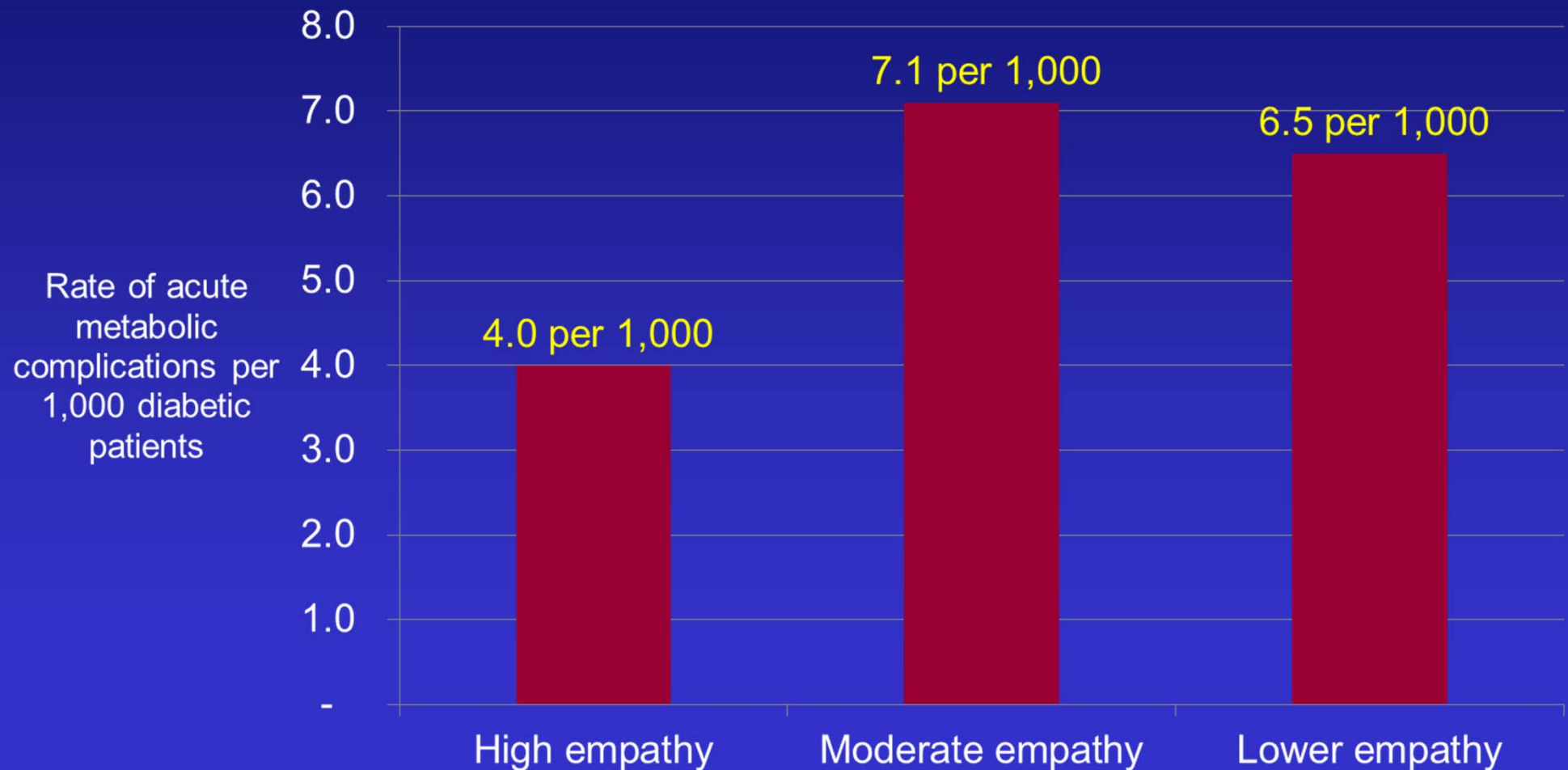




Data and methods:

- 20,961 patients with type 1 or type 2 diabetes mellitus
- Enrolled with one of 242 primary care physicians for the entire year of 2009
- 80% response rate
- Jefferson Scale of Empathy scores compared with occurrence of acute metabolic complications (diabetic ketoacidosis, hyperosmolar state, coma) in diabetes patients hospitalized in 2009

Association Between Empathy Scores of Physician Participants (n = 242) and Disease Complications in Their Diabetic Patients (n = 20,961) Parma, Italy



Results:

- Patients of physicians with high empathy scores had a significantly lower rate of acute metabolic complications ($P < .05$)
- Logistic regression analysis to control for impact of:
 - Physician gender and age
 - Patient gender and age
 - Type of practice
 - Geographical location of practice
 - Length of time the patient had been enrolled with the physician
- **Higher physicians' empathy scores** were associated with **fewer acute metabolic complications**:
(*odds ratio = .59; 95% CI, .37–.95*)

Conclusions:

- Findings of these two studies suggest that physician empathy is significantly associated with clinical outcome for patients with diabetes mellitus
- Empathy should be considered an important element in patient care and a significant factor of overall physician competence that must be enhanced during medical education and applied in the practice of medicine



**Approaches to
enhance empathy**

Future research

Can We Teach Empathy?

1. Improving interpersonal skills
2. Audio- or video-taping of encounters with patients
3. Exposure to role models
4. Role playing (e.g., aging game)
5. Shadowing a patient (patient navigator)
6. Hospitalization experiences
7. Study of literature and the arts
8. Improving narrative skills
9. Theatrical performances
10. Balint method
11. Other innovative approaches

Hojat, 2009, *J Health & Human Services Administration*, 31, 412-450.

Other innovative Approaches

A variety of other innovative approaches can be used to enhance empathy:

- **Rocking Chair Project** (Magee & Hojat *Family Medicine*, 2010, 7, 465-466).
- **Video Clips of Encounters with Patients Selected from Movies** (submitted for publication, 2012)

Future Research

- Further studies on the link between physician empathy and **clinical outcomes** in different disease conditions and different cultures.
- Developing **national norm tables** for scores of the JSE for different population of medical students, physicians, and other health professions groups.
- Determining **cut-off cores** to identify those in need of training to enhance their empathy.
- Finding the most efficient and long lasting approaches to **enhance and sustain empathy** in students and practitioners.
- Searching for **neurological underpinnings** of empathy.

On Understanding of the Patient

“It is as important to know what kind of man has the disease, as it is to know what kind of disease has the man.”

Sir William Osler, 1932.

For more discussion on this topic and other cutting-edge health care issues, visit the Nash on Health Policy blog at:
<http://nashhealthpolicy.blogspot.com>

Did you know you can listen to past Health Policy Forums online? Check out Health Policy Forum Podcasts at:
<http://jdc.jefferson.edu/hpforum/>



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